

REMARKS

Entry of this Amendment in accordance with the provisions of 37 CFR § 1.114 is respectfully requested, noting that this Amendment is filed as a Submission with a Request for Continued Examination (RCE) on even date herewith.

This Amendment is in response to the Office Action dated March 30, 2010. At entry of this paper, claims 8 and 10-18 will be pending for further consideration and examination in the application. Claims 1-7 and 19 have been withdrawn from consideration. All rejections are traversed, in so far as the rejections are applicable to the present claims. Reconsideration and allowance of this application, as amended, is respectfully requested. The Applicants also note that the co-pending EPO Application has been found to be allowable and has issued as European Patent EP 1 620 696 B1.

In the office action, claims 8-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Davis et al. (U.S. Patent 5,005,694, "Davis") in view of DE 32 26 744. Claims 8-18 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Owen (U.S. Patent 4,817,787) in view of DE 32 26 744. In addition, claims 15-16 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Owen in view of DE 32 26 744 as applied to claim 9, and further in view of Gaston (U.S. Patent 5,007,230).

By the present amendment, claims 1-7 and 19 remain withdrawn from consideration. The applicants note that claim 8 is a linking claim to claim 1-7, and that of the claims share the same special technical feature, i.e., x-ray examination of the detonating cord in its packaging prior to shipment. Therefore, claims 1-7 and 19 should be examined, given that claim 8 is allowable as discussed in the following paragraphs.

Claim 8 has been amended to recite features from claim 9, and claim 9 has been cancelled without prejudice or disclaimer thereof. Support for the amendment to claim 8 can be found in previously presented claim 9, and in page 3, lines 14-16 of the originally filed specification, (or paragraph [0016] of the application's U.S. PG-PUB 2007/0170074), which states that "FIG. 1 shows such an X-ray image of the spiral detonating cord 1 in its packaging." No new matter has been added. No claims have been cancelled.

In regards to the rejections of amended independent claim 8, none of Davis, Owen, or DE 32 26 744, either individually or in combination, disclose, suggest, or otherwise render obvious the features recited in claim 8 of "wherein the detonating cord is subjected to X-ray examination while the detonating cord is wound in a single plane as a flat spiral, without being unwound."

According to the Examiner's admission in pages 3 and 4 of the Office Action, "[t]he difference between the claimed subject matter," on the one hand, and the Davis and Owen references on the other hand, is that "there is no disclosure of X-ray examination of the detonating cord and its packaging" in either Davis or Owen.

In order to remedy this defect in both Davis and Owen, the Examiner applied the DE 32 26 744 reference to Davis, and separately applied the DE 32 26 744 reference to Owen. According to the rejections, the DE 32 26 744 reference "teaches [that] the examination of the detonating cords by a radioactive source is well known."

The rejections (Davis in view of DE 32 26 744, Owen in view of DE 32 26 744) further state that "[s]ince an X-ray is a source of radiation, the language is broad enough to encompass the examination disclosed by DE 32 26 744. It would have been obvious to one of ordinary skill in the art to subject the package of [either Davis

or Owen] to X-ray examination as taught by DE 32 26 744 for the reason of determining whether or not the detonating cord has any flaws.”

However, the Applicants disagree with the Examiner’s characterization of the DE 32 26 744 reference. According to page 7 of the DE 32 26 744 reference, the paragraph which begins with the phrase “Gemäß Figur 1 wird bei einer Vorrichtung zur Prüfung” is translated as follows:

According to Figure 1, in order to test the filling density of a detonating cord, this cord 1 is unrolled from a feed drum or unwinding drum, specifically by means of a drive roller 4. The cord 1 is guided to a take-up and wind-up drum 3 by way of guide rollers 5, 6, 7 and tensioning rollers 8, 9. The cord 1 is guided past a radioactive source 10, which is situated in front of the cord. If a defect occurs, the sensor that consists of the ionization chamber 11 transmits a signal, and the device is turned off. Subsequently, the defective cord part is removed.

Therefore, according to this disclosure in the DE 32 26 744 reference, the detonating cord 1 is unrolled from a feed drum, guided past a radioactive source 10, and subsequently wound back up onto a wind-up drum 3, by way of guide rollers 5, 6, 7 and tensioning rollers 8, 9. This is shown in Figure 1 of the DE 32 26 744 reference.

Independent claim 8, on the other hand, now expressly recites the feature of “wherein the detonating cord is subjected to X-ray examination while the detonating cord is wound in a single plane as a flat spiral, without being unwound.” Unlike the DE 32 26 744 reference, claim 8 expressly requires that the detonating cord be subjected to X-ray examination while the detonating cord is wound in a single plane as a flat spiral, without being unwound. In contrast, page 7 of the DE 32 26 744 reference expressly states that “[a]ccording to Figure 1, in order to test the filling density of a detonating cord, this cord 1 is unrolled from a feed drum or unwinding drum, specifically by means of a drive roller 4.”

In the rejection of currently cancelled claim 9 (whose features have been amended into claim 8), based on Davis in view of DE 32 26 744, the rejection states that “[a]s to claims 9, 12 and 14-18, nothing is recited therein that further limits the method in a manipulative sense.” The Applicants respectfully disagree. As discussed in the preceding paragraphs, DE 32 26 744 expressly requires the unwinding of the detonating cord, a process that is time consuming and can introduce defects into the detonating cord, which contradicts the features of amended claim 8, and which renders the claimed features as non-obvious.

The DE 32 26 744 reference does not disclose, suggest or otherwise render obvious the recited feature in amended claim 8 of “wherein the detonating cord is subjected to X-ray examination while the detonating cord is wound in a single plane as a flat spiral, without being unwound,” and neither Davis nor Owen remedy this deficiency. The Gaston reference applied in the rejections of claims 15 and 16 also does not remedy this deficiency. For these reasons, the rejections of claim 8, and of all of its dependent claims, should be withdrawn.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus, LLP Deposit Account No. 01-2135 (Docket No. 306.45490X00), and please credit any excess fees to such deposit account.

Respectfully submitted,
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